ORIGINAL

Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, DC 20554

In the Matter of:

Establishing Rules and Policies For the Use of Spectrum for Mobile Satellite Service In The Upper And Lower L-Band

IB Docket No. 96-132

COMMENTS AND OPPOSITION OF MOTOROLA SATELLITE COMMUNICATIONS, INC. AND IRIDIUM LLC

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Dated: September 3, 1996

SUMMARY

Motorola Satellite Communications, Inc. ("Motorola") and Iridium LLC oppose the Commission's tentative conclusion to provide AMSC with preferred access to spectrum in the lower L-band while denying other qualified entities an opportunity to apply for licenses in this "generic" MSS spectrum. The lower L-band is the logical expansion band for Big LEO operators that can use this spectrum far more efficiently to provide domestic, regional and global MSS services. The Commission should not forego this opportunity to use the limited spectrum allocated on a global basis for a purely domestic MSS system.

Motorola has previously demonstrated that even one AMSC subscriber unit operating in the lower L-band could cause harmful interference to the IRIDIUM® System due to the out-of-band emissions of the AMSC terminals. Based upon this showing, Motorola and AMSC agreed that AMSC's uplinks would not operate below 1631.5 MHz. If the Commission concludes that AMSC should be authorized to operate in the lower L-band, the Commission must hold AMSC to its agreement not to operate below 1631.5 MHz by placing such a condition in its license. AMSC would not be injured by such a limitation as it constructed its first satellite and mobile earth stations with the capability to operate in this band entirely at its own risk. More importantly, this limitation is consistent with AMSC's 1995 agreement with Motorola.

The Commission's sole justification for its proposal to permit only AMSC access to these bands -- that AMSC must have at least 20 MHz of spectrum to operate as a viable MSS system -- is based upon a misinterpretation of its tentative conclusion made more than 10 years ago. The Commission never concluded that a single MSS

system must have at least 20 MHz of spectrum to be viable, but that the MSS service initially requires this minimum amount of spectrum. Even if read as a tentative finding as to the spectrum needs of a single MSS system, the Commission has rejected this prior estimate by its subsequent grants of far less than 20 MHz to later second generation MSS systems. For example, in the context of its Big LEO MSS proceeding, the Commission has concluded that 8.25 MHz in each direction "would be sufficient to support a viable [global] system."[1/]

Rather than giving preferred access to an inefficient first generation MSS system with only regional coverage, the Commission must use this proceeding as an opportunity to "refarm" the lower L-band for the use of second generation MSS systems that are more spectrally efficient and have global coverage. At a minimum, the Commission should open the lower L-band to MSS systems that propose substantial frequency re-use and small spot beams.

Contrary to the Commission's claim that no harm has resulted from its ambiguous language as to the proper timing for filing lower L-band applications, Motorola and other MSS proponents suffer significant harm from the Commission's decision to accept and now amend AMSC's application. If the Commission had lifted the freeze and invited competing applications in response to AMSC's 1993 application, Motorola would have sought use of this spectrum. The Commission would now be setting policy and eligibility standards for the lower L-band in the context of several viable applicants, not just AMSC.

1/ Big LEO Order, 9 FCC Rcd 5936, 5959-60 (1994).

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In the Matter of:	
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COMMENTS AND OPPOSITION TO DENY OF MOTOROLA SATELLITE COMMUNICATIONS, INC. AND IRIDIUM LLC

To: The Commission

Motorola Satellite Communications, Inc, ("Motorola") and Iridium, LLC (formerly Iridium, Inc.) ("Iridium") submit these comments in response to the Commission's Notice of Proposed Rule Making in the above-captioned proceeding.[1/] In addition, Motorola and Iridium oppose the Commission's proposed amendment to AMSC's current license to the extent the Commission intends to authorize AMSC to operate in the lower L-band (1525 -1530 MHz, 1530-1544 MHz, and 1626.5-1645.5 MHz bands).[2/]

1/ Notice of Proposed Rule Making in I.B. Docket 96-132 (rel. June 18, 1996) ("L-band Assignment Notice")

2/ This opposition is submitted in accordance with 47 C.F.R. § 1.87 and paragraph 17 of the L-band Assignment Notice. Motorola opposed AMSC's application and amendment to serve the Lower L-band when they were originally placed on Public

(continued ...)

Motorola and Iridium are interested parties to this proceeding as Motorola has been licensed to use 5.15 MHz of spectrum at 1621.35-1626.5 MHz to provide Big LEO MSS services in the United States and throughout the world via the IRIDIUM® System.[3/] The bands now proposed for AMSC's exclusive use may be vital to the expansion needs of the IRIDIUM System and other MSS providers who would provide competition to AMSC in the U.S. domestic market and who have been granted considerable, less spectrum than the Commission now proposes to provide AMSC in this highly unusual and unlawful procedure.

Motorola and Iridium oppose the Commission's tentative proposal to provide AMSC with preferred access to spectrum in the lower L-band while denying other qualified entities an opportunity to apply for licenses in these MSS bands. In no event should AMSC be authorized to construct or operate space stations or earth stations capable of operating below 1631.5 MHz since AMSC has previously agreed with Motorola that it would not do so. AMSC would not be injured by such a limitation as the Commission has repeatedly warned AMSC that its construction or operation of facilities in the lower L-band would be at its own risk.

[2/] (... continued)
Notice in 1993. Motorola requests that these pleadings be incorporated by reference into the record of this proceeding. Motorola Petition to Dismiss and/or Deny in File No. 59-DSS-MP/ML-93 (December 3, 1993); Motorola Reply Comments in Support of Petition to Dismiss and/or Deny in File No. 59-DSS-MP/ML-93 (January 12, 1994); Motorola Comments in Support of LQSS' December 1, 1993 Pleading in File No. 59-DSS-MP/ML-93 (December 2, 1993).

[3/] See In re Application of Motorola Satellite Communications, Inc. for Authority to Construct, Launch and Operate a Low Earth Orbit Satellite System in the 1616-1626.5 MHz Band, Order and Authorization, 10 FCC Rcd 2268 (Int'l Bureau, 1995); recon. denied, Memorandum Opinion and Order, FCC 96-279 (rel. June 27, 1996).

Moreover, the Commission's rationalization for its proposal to permit only AMSC access to these bands -- that AMSC must have at least 20 MHz of spectrum to operate as a viable MSS system -- is based upon a misinterpretation of its tentative conclusion made more than 10 years ago. Even so, the Commission has rejected this estimate by its subsequent grants of far less than 20 MHz of spectrum to next generation MSS systems. A Commission decision providing AMSC guaranteed access to at least 20 MHz of prime MSS spectrum would be wholly unfair to other second generation MSS licensees, like Motorola, which initially were assigned only 5.15 MHz of spectrum.

The Commission is well-informed as to the overall scarcity of spectrum for MSS. There is simply no precedent in the satellite field for the Commission's reserving this spectrum for a single applicant. Rather than giving preferred access to an inefficient first generation MSS system with only regional reach, the Commission must use this proceeding as an opportunity to "refarm" the lower L-band for the use of second generation MSS systems that are more spectrally efficient and have global coverage.

Finally, contrary to the Commission's claim, Motorola and others have been injured by the Commission's "ambiguous statements" as to the applicability of its freeze on competing MSS applications. If not for this language, the Commission would now be considering eligibility rules for the lower L-band n the context of several viable MSS applications.

I. AMSC HAS AGREED NOT TO OPERATE BELOW 1631.5 MHZ AND WILL NOT BE INJURED IF THE COMMISSION SO LIMITS ITS OPERATIONS

As Motorola has demonstrated in the context of AMSC's instant application and its earlier application for blanket earth station authority, [4/] out-of-band emissions from just one AMSC subscriber unit operating at the band edge (1626.5 MHz) could cause harmful interference to the IRIDIUM System. To resolve this problem, AMSC and Motorola previously agreed that AMSC would not operate below 1631.5 MHz. The Commission must hold AMSC to this agreement as a condition of any grant of spectrum in the lower L-band. Such a limitation will not injure AMSC in any way.

AMSC's operations at the band in the lower L-band margin would seriously degrade the performance of the IRIDIUM System to the point of wiping out all subscriber units within line-of-sight of AMSC mobile earth stations. As Motorola has repeatedly explained, this is due to the fact that AMSC terminals do not adequately attenuate out-of-band emissions. Therefore, AMSC must either significantly reduce the noise output of its terminals at the 1626.5 MHz band edge or remove its terminals in frequency from the band edge.[5/]

In the context of Motorola's concerns regarding the out-of-band emissions of AMSC's user terminals, Motorola and AMSC entered into informal coordination discussions that resulted in an agreement last year. Motorola and AMSC agreed that

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[4/] Application of AMSC in File No. 2823-DSE-P/L-93.

[5/] See, e.g., Motorola Technical Appendix in its Petition to Deny the instant application.

its user terminals would not cause unacceptable interference to the IRIDIUM System "so long as AMSC's terminals operate in the Earth-to-space direction above 1631.5 MHz"[6/] On the basis of this agreement, Motorola withdrew its technical objections to AMSC's blanket license application.

If the Commission ultimately grants AMSC access to spectrum in the lower L-band, it must condition this grant on AMSC's agreement not to operate below 1631.5 MHz. This condition will not impinge upon AMSC's operations in any way. Since its user terminals may not operate below 1631.5 MHz in accordance with its agreement with Motorola, there is no reason for AMSC to have authority to construct or operate its satellites below this frequency.

AMSC will not be harmed by this condition on its entry into the lower L-band. It constructed its AMSC-1 satellite to operate in the lower L-band entirely at its own risk based upon a Commission waiver:

> While we generally do not waive the construction permit requirement when concerns have been raised regarding the underlying application, we believe that the unique circumstances here justify a waiver. AMSC is in the process of constructing AMSC-1, and it will be built regardless of whether we grant the application for the MMSS bands. The cost of incorporating the additional capacity, however, will increase substantially if AMSC is not permitted to implement modifications as the satellite is being built. If AMSC wishes to take advantage of this saving at the risk that its

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6/ See attached Letter of June 28, 1995 from Philip Malet to William Caton. AMSC SUBSIDIARY CORPORATION: Modification of Its Blanket License to Construct and Operate up to 200,000 L-band Mobile Earth Stations File Nos. 894-DSE-MP/L-95; 1034-DSE-MP/L-95, Order and Authorization, 10 FCC Rcd 10924 n. 2 (1995).

> underlying application may not be granted, we see no reason to prevent if from doing so.[7/]
>
> This waiver is without prejudice to final action on AMSC's underlying application [to provide service] for the MMSS bands or on any related issue regarding this satellite. If the application is denied, expenditures made pursuant to this waiver will not be included in any rate base or charges to expense for rate purposes but will be charged to surplus.[8/]

In addition, AMSC does not have authority to operate its AMSC-1 satellite with mobile earth terminals in the lower L-band on a permanent basis, but operates pursuant to Special Temporary Authority (STA) that affords it no expectation of continued operations in these bands. The Commission's STA is intended to allow AMSC to migrate its mobile earth terminals from Inmarsat space segment to its own satellites, not to introduce new terminals into this band or construct additional satellites to operate with these terminals in the lower L-band.[9/]

Therefore, AMSC is under no expectation that it will have permanent authority to operate in the lower L-band or that it would recover the costs of constructing AMSC-1 to do so.[10/] Even so, conditioning AMSC's operations to above

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[7/] AMSC Application to Modify Space Station Authorizations in the Mobile Satellite Service, Memorandum Opinion and Order, 8 FCC Rcd 4040, 4048 (1993). (emphasis added).

[8/] Id.

[9/] Application of AMSC For Modification of its Blanket License to Construct and Operate 30,000 L-band Mobile Earth Stations, Order and Authorization, 10 FCC Rcd 10458 (1995); Order on Reconsideration, 11 FCC Rcd 5527 (1995).

[10/] To the extent the Commission believes that AMSC would suffer hardships if not permitted to continue its operations in the lower L-band, L-band Assignment Notice at ¶ 13, the Commission must ignore any expenditures or actions that AMSC has taken at its own risk.

1631.5 MHz is vital to the interference free operation of the IRIDIUM System -- and AMSC has already agreed to limit its operations in this way.

II. THE COMMISSION'S GRANT OF PREFERRED ACCESS TO AMSC BASED UPON A 1985 ESTIMATE OF SPECTRUM REQUIREMENTS IS UNJUSTIFIED AND INCONSISTENT WITH ITS TREATMENT OF OTHER MSS LICENSEES

The Commission rationalizes its tentative decision to provide AMSC with preferred access to the lower L-band by relying upon its over ten year old estimate "that 20 MHz is the minimum amount of spectrum necessary for a viable MSS system."[11/] In so doing, Commission overstates its original interpretation of an MSS system's spectrum needs. Moreover, recent developments in the Big LEO MSS service indicate that the Commission now believes that an MSS system can be economically viable with less than 20 MHz of spectrum. Therefore, there is no justification for ensuring that AMSC is provided a minimum of 20 MHz of L-band spectrum.

The Commission relies upon its 1985 MSS Notice for its tentative conclusion that 20 MHz is the minimum necessary amount of spectrum for an MSS system.[12/] However, the 1985 MSS Notice reached no such conclusion. There, the Commission was confronted with estimates ranging from 9 MHz to 100 MHz for a viable MSS system. Rather than focusing on any minimum amount, the Commission established two factors for establishing the necessary spectrum requirements for an

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11/ L-band Assignment Notice at ¶ 10.

12/ Rules to Allocate Spectrum for and to Establish Rules and Policies Pertaining to the Use of Radio Frequencies in Land Mobile Satellite Service for Various Common Carrier Services, Notice of Proposed Rule Making, 50 F.R. 8149 (February 28, 1985) ("1985 MSS Notice")

MSS system: (1) the number and kind of services proposed; and (2) the degree to which spectrum efficiency is incorporated.[13/] The Commission then noted that any estimate that it would make as to the necessary amount of spectrum for a viable MSS system would be "speculative," but concluded that an allocation of 20 MHz "will be needed over the long term in order to allow development of multiple services and efficient use of spectrum[14/] in this service as a whole." Thus, the Commission made no conclusion at that time as to what amount of spectrum was necessary to operate a single MSS system, but the needs of the service as a whole. This interpretation is supported by the Commission's decision to propose an immediate allocation of only 8 MHz and to accept applications based upon this amount of spectrum. In its Report and Order, the Commission confirmed that its allocation estimate of 20 MHz was for the MSS service, not a particular MSS provider.[15/]

The Commission's current reliance on this 20 MHz minimum for an MSS system is further undermined by its subsequent decisions in assigning MSS frequencies. In the "Big LEO" MSS context, the Commission has completely ignored its 1985 finding that it relies upon today to support preferred access for AMSC in the lower L-band. To date, the Commission has authorized three Big LEO MSS licensees. The Odyssey and Globalstar systems have been assigned 11.35 MHz of spectrum for uplink

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13/ Id. at ¶ 10.

14/ Id.

15/ Rules to Allocate Spectrum for and to Establish Rules and Policies Pertaining to the Use of Radio Frequencies in Land Mobile Satellite Service for Various Common Carrier Services, Report and Order, 2 FCC Rcd 1825 (1986); See also Memorandum Opinion and Order, 4 FCC Rcd 6016, 6019 (1989).

operations in the L-band to be used on a shared basis.[16/] Moreover, the Commission has determined that up to four MSS providers may be required to share this band in the future.[17/] If only one of the sharing systems is ultimately licensed, that system could be assigned only 8.25 MHz in the L-band, which the Commission concluded "would be sufficient to support a viable system."[18/] Moreover, the IRIDIUM System has been assigned, only 5.15 MHz of spectrum in the L-band for both uplinks and downlinks, with the potential for an additional 3.1 MHz if only one CDMA system is ultimately licensed.[19/] These subsequent grants suggest that the Commission now realizes that second generation MSS systems do not require a minimum of 20 MHz (or the 28 MHz originally assigned to AMSC) in order to operate.

Thus, there is no support in the record that a single MSS system requires 20 MHz of spectrum to remain viable. Without this evidence, the Commission must rethink its tentative decision to provide AMSC with preferred access to lower L-band spectrum. This spectrum should instead be made available to second generation MSS

16/ Rules and Policies Pertaining to a Mobile Satellite Service in the 1610-1626.5/2483.5-2500 MHz Frequency Bands, Report and Order, 9 FCC Rcd 5936, 5955-56(1994) ("Big LEO Order").

17/ Including downlink operations, the Commission has assigned 27.85 MHz of MSS spectrum that may be shared by up to four systems.

18/ Id. at 5959-60.

19/ Id. at 5595.

systems that can use the lower L-band in a far more efficient manner to provide global, rather than regional, MSS services.[20/]

III. THE COMMISSION SHOULD USE THIS PROCEEDING AS AN OPPORTUNITY TO RE-FARM THE LOWER L-BAND FOR MORE EFFICIENT SECOND GENERATION MSS SYSTEMS

Rather than provide AMSC with exclusive access to the lower L-band, the Commission should take this opportunity to adopt assignment policies that favor more spectrum-efficient second generation MSS systems that can compete with AMSC in these bands. The Commission today is faced with several licensed MSS systems and other MSS proponents offering both domestic and global MSS services. These MSS systems should not be disadvantaged by technical assumptions that are now more than 10 years old. Nor should the Commission provide unqualified support for a first generation MSS system that does not use spectrum in an efficient manner.

The Commission is well aware of the shortage of usable MSS spectrum[21/] There is no legal or technical support for the Commission moving to grant preferred

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20/ While Motorola and Iridium do not support the Commission's tentative conclusion here that 20 MHz is vital to the operation of AMSC's system, they do support another part of the FCC's reasoning as regards to coordination of spectrum. The Commission should lend its support to all U.S. satellite licensees who are threatened with the loss of spectrum due to no fault of their own. This is particularly true in the Big LEO context, where the licensees were granted far smaller amounts of spectrum for their operations. If the licensees cannot depend upon continued Commission support for their spectrum assignments, this will, as the Commission understands, "have a chilling effect on the introduction of new services to the public." L-band Assignment Notice at ¶ 14. Nevertheless, this support should not be based upon adherence to technical assumptions concerning spectrum needs that are out-dated or wrong.

21/ Sec. e.g., Motorola's comments on ET. Docket 95-18.

access to only one company to use limited spectrum, particularly in the satellite area. The Commission must develop a record that supports this preferred access policy, or rethink this policy altogether.

The Commission should not lock-in its assignment assumptions based upon old technology. The Commission recognized this policy when it first allocated spectrum for MSS. Even though it estimated that 20 MHz of spectrum would be needed to accommodate MSS in the long term, it concluded that this assumption might change.

> It was envisioned that the mobile satellite system would evolve from a near term first generation system into a second and perhaps third generation system to be implemented in the 1990s. More sophisticated satellite technologies would enable more efficient spectrum utilization through implementation of spot beams. The first generation system would, among other things, gauge the actual demand for this service.[22/]

As Motorola has repeatedly urged, the Commission should impose sound spectrum management policies in this band. Rather than opening up the Lower L-band without operational or technical standards that ensure efficient use of the limited spectrum available -- as it has proposed to do here -- the Commission must consider means to provide access to other MSS providers. In the allocation phase of this proceeding, for example, Motorola explained that Inmarsat has access to 86 MHz of L-band MSS spectrum with only 30,000 mobile terminals as part of its global system. This is clearly an inefficient use of spectrum when juxtaposed against the millions of

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22/ MSS Allocation Report and Order at n.97.

users that the Big LEO operators will serve with just 33 MHz of spectrum.[23/] The Commission should apply a similar analysis to AMSC's current and projected use of the band before granting it 28 MHz of spectrum on a preferred basis. Such an analysis would be wholly consistent with the Commission's original determination that the spectrum required for an MSS system should be based on "the number and kind of services proposed and the degree to which spectrum efficiency is incorporated."[24/] At minimum, the Commission should only open this band to systems that propose substantial frequency re-use and small spot beams.

IV. MOTOROLA AND OTHER MSS PROPONENTS ARE HARMED BY THE AMBIGUITIES IN THE COMMISSION'S ORDERS FREEZING THE FILING OF APPLICATIONS FOR GENERIC MSS IN THE L-BAND

Contrary to the Commission's claim that no harm has resulted from its ambiguous language as to the proper timing for filing lower L-band applications, Motorola and other MSS proponents have suffered significant harm from the Commission's decision to accept and now amend AMSC's application. If the Commission had lifted the freeze and invited a applications in response to AMSC's 1993 filing, Motorola would have sought use of this spectrum. Moreover, the Commission would now be setting policy and eligibility standards in the context of several viable applicants, instead of just one.

23/ Motorola Comments in CC Docket 90-56 (September 8, 1993).

24/ 1985 MSS Notice at ¶ 10.

Motorola renews its opposition to any consideration of the AMSC application. Motorola is on record against the Commission's procedures used to accept the AMSC application in 1993 despite the existence of a filing freeze.[25/] These arguments need not be repeated here. However, to the extent that the Commission is now about to license AMSC to use the 1525-1530 MHz band as well, the Commission further violates the terms of its own freeze order. While the Commission states that it completed its allocation proposal in June 1993 and that AMSC filed its application after that date, the Commission did not complete its allocation proceeding for the 1525-1530 MHz band until July 6, 1995.[26/] Under the terms of its own freeze order, the Commission should not have accepted applications for an MSS system "until the allocation proposals for the band are finalized."[27/] Thus, the Commission's claim as to the propriety of accepting AMSC's application in these bands cannot be based on the timing of AMSC's application.

Despite these procedural defects, the Commission claims that no harm has been caused to any competing applicants because the Commission has now tentatively decided by rule that only AMSC would be eligible to be licensed for the next 28 MHz of coordinated spectrum.[28/]

[25/] See Motorola pleadings at note 2.

[26/] Rules to Allocate Spectrum for Mobile-Satellite Services in the 1530-1544 MHz and 1626.5-1645.5 MHz Band, Second Report and Order, 10 FCC Rcd 7305 (1995).

[27/] L-band Assignment Notice at ¶ 18 citing Lower L-band Notice, 5 FCC Rcd 1255 n.23 (1990) (emphasis in original).

[28/] Id. at ¶ 19.

Motorola and other MSS proponents have indeed been harmed by this procedural defect by Commission does not now have before it other applicants for this spectrum who have expressed clear and consistent interest in using these bands. Its decision-making in this rule making is therefore tainted by the fact that it is now considering only one concrete application for these bands -- and from an applicant that it has already been authorized to spend significant sums for construction of satellites and mobile earth stations to use these bands. The Commission proposes preferred access to the lower L-band for AMSC in part due to its substantial expenditures and in part because it is the only MSS applicant in a position to provide domestic service.[29/] The Commission is making these decisions in a vacuum only because it refuses to permit other qualified applicants to apply in these bands. Motorola and others have been placed at a competitive disadvantage in offering service in these bands -- and the Commission now uses this as a justification for moving forward with its preferred access policy for AMSC -- solely due to the "partial" freeze on MSS applications since 1990. The Commission's action to in effect remove the freeze only for AMSC is arbitrary, capricious and an abuse of its discretion.

29/ See L-band Assignment Notice at ¶ 13.

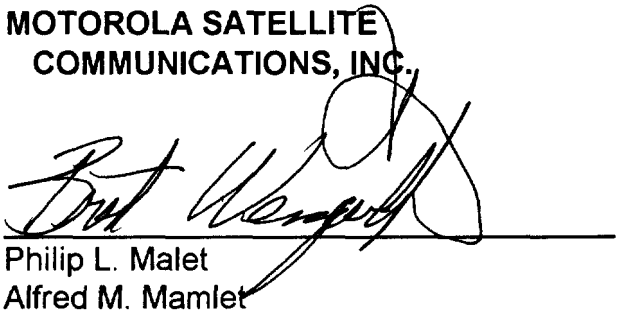
V. CONCLUSION

The Commission should rethink its tentative decision to provide AMSC with preferred access to spectrum in the lower L-band. The basis for the Commission's proposal, that an MSS system requires a minimum of 20 MHz of spectrum, is not supported by the record. In any event, the Commission must not authorize AMSC to operate uplinks below 1631.5 MHz as AMSC has already agreed not to do so in order to protect the IRIDIUM System from harmful interference.

The Commission's proposal to provided AMSC preferred access to the Lower L-band is arbitrary, capricious and an abuse of its discretion. Moreover, the proposal is not supported by the record.

Respectfully submitted,

MOTOROLA SATELLITE COMMUNICATIONS, INC.



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Dated: September 3, 1996

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June 28, 1995

DELIVERY BY HAND

Mr. William F. Caton
Acting Secretary
Federal Communications Commission
1919 M Street, N.W.
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Re: FCC File Nos. 681-DSE-MP/L-95; 2823-DSE-P/L-93; 894-DSE-MP/L-95

Dear Mr. Caton:

Motorola Satellite Communications, Inc. ("Motorola") is submitting this letter to inform the Commission that it has been able to resolve the out-of-band emissions questions raised by the above-captioned applications through technical discussions and the exchange of information with American Mobile Satellite Corporation ("AMSC") and its terminal manufacturer Westinghouse Electric Corporation ("Westinghouse").

The information supplied to Motorola by Westinghouse and AMSC (including information provided by AMSC concerning MSS terminals being manufactured by MELCO and Trimble) indicates that Westinghouse's terminals and the terminals of MELCO and Trimble, as currently being constructed, will not cause unacceptable interference to the IRIDIUM® System in the spectrum assigned to it so long as AMSC's terminals operate in the Earth-to-space direction above 1631.5 MHz. AMSC has agreed to keep Motorola informed as to any changes in the out-of-band emissions expected from its mobile terminals. On this basis, Motorola withdraws its technical and engineering objections to the above-captioned applications.

If there are any questions regarding this matter, please contact the undersigned.

Respectfully submitted,

MOTOROLA SATELLITE COMMUNICATIONS, INC.

By: _____

Its Attorney

cc: Scott Blake Harris
Thomas Tycz
Counsel of Record

CERTIFICATE OF SERVICE

I, Brent Weingardt, hereby certify that the foregoing **Motorola Comments in I.B. Docket 96-132** was served by hand delivery or first-class mail, postage prepaid, this 3rd day of September, 1996 on the following persons:

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